



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,764	04/05/2000	John L. Howes		6749

7590 10/23/2002

Peter Gibson #307  
6316 Greenspring Avenue  
Baltimore, MD 21209

EXAMINER

ZURITA, JAMES H.

ART UNIT

PAPER NUMBER

3625

DATE MAILED: 10/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

SK

# Office Action Summary

Application No.

09/543,764

Applicant(s)

HOWES, JOHN L.

Examiner

James Zurita

Art Unit

3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☒ Interview Summary (PTO-413) Paper No(s). 10.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

Examiner rejected claims 1-30 in a First Office Action on 15 January 2002. PTO form 413, Interview Summary is attached concerning Interview of 03 April 2002. In his response to the first office action, applicant amended claims 1-4, 6, 10, 16, 24, 34, and deleted claim 5. In his claims, applicant changed several terms, including *non-standard* [colors] to *custom* [colors], and *standard volume containers* to *rigid metal paint cans and non-standard volume* [expansible containers] to *molded plastic* [expansible containers].

Applicant's arguments with respect to amended claims 1-4, 6, 10, 16, 24 and 34 have been fully considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with respect to claims 7-9, 11-15, 17-23 and 25-33 have been fully considered but they are not persuasive.

Claims 1-4, 6-34 remain and will be examined.

### ***Response to Arguments***

In section C, paragraphs 3 and 4 of his amendment, applicant argues that rejection of obviousness is rendered moot by Examiner admission that *Distributor Roles* "does not disclose ordering, production, packing and delivery of liquid coatings." Applicant argues that his invention is non-obvious and is distinguishable from prior art by restricting his invention, and including a plurality of elements each specific to "containerized liquid coating products" which are wholly absent from the reference cited in the rejection. Applicant also argues that the patentable novelty presented by the

present claims in view of the prior art is a method for "the direct supply for containerized liquid coating product ... by a supplier remote from a customer." Applicant also argues that since claims are limited to containerized liquid coating products, they are patentable over prior art.

In response to these arguments, Examiner agrees that *Distributor Roles* does not mention liquid coatings. However, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references with knowledge generally available would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

On page 13, paragraph 8 of his amendment, Applicant argues that Examiner's statements constitute support of non-obviousness of his invention, in that there are only two reasons this liquid coatings were not disclosed by the prior art: (1) it was either unknown at the time or (2) the means of accomplishing it were unknown. Applicant concludes that his invention was certainly novel because one of ordinary skill in the art (a) would know that his invention would be beneficial and (b) would have used or disclosed applicant's invention if applicant's invention was known or obvious.

In response to these arguments, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction. Reconstructions are based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and

does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

On pages 13-14, paragraphs 8-10 of his amendment, Applicant argues that grounds for an obviousness rejection are overcome by the observation that there is at least one good reason why partial filling of paint cans is unknown in the prior art: paint is *priced* according to units comprised only by full containers and therefore the alteration in pricing enabled by internet ordering of liquid coating product produces an unexpected result: the feasibility of partial filling of containers in fulfillment of an order for liquid coating product, and that prior art does not show *pricing* of partially filled paint cans.

In response to these arguments, the term unexpected results does not appear in the application. Further, In alleging unexpected results, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. In addition, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., pricing) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are

not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that no valid teaching or suggestion has been given for combining or modifying the teachings of *Distributor Roles* to produce the claimed invention, and that there is no teaching, suggestion, or motivation to do so found either in the reference itself or in the knowledge generally available to one of ordinary skill in the art. Applicant also argues that Examiner's statement that "hardware stores and home improvement retailers sell a variety of products including paints and other liquid coatings" is unsupportive of rejection of his invention because it fails to present evidence that the prior art discloses, suggests or otherwise renders his invention obvious in view of the prior art. Applicant also argues that Examiner's statements in support of obviousness rejection are only general references, speculation and conjecture, and that Examiner has failed to present evidence that prior art discloses, suggests or otherwise renders the invention obvious, and that there is no suggestion in the prior art of liquid coating products.

In response to these arguments, Examiner notes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it is generally known to one of ordinary skill in the art that hardware stores and home

Art Unit: 3625

improvement retailers sell many types of products, including liquid coatings. *Distributor Roles* discloses an Internet order, production, fulfillment and delivery system for home improvement products. It is well known that home improvement products include liquid coating products. *Distributor Roles* suggests that combining electronic commerce and home improvement products may affect role of retailers and distributors in the industry. The suggestion to combine *Distributor Roles* with generally known information exists in *Distributor Roles*. The motivation for combining is provided in motivation statements related to each of the claims.

*Distributor Roles* teaches a direct supply electronic commerce order system and business method as applied to home improvement and building products. The system accepts customized orders from customers. Customer orders trigger assembly in a production system line to fulfill product orders according to customer specifications. The orders are packaged in suitable containers and delivered directly from suppliers to customers, bypassing retailers and wholesalers in a supply chain. *Distributor Roles* suggests an increased role for distributors. Lowe's Superstore discloses a home improvement store and includes disclosure concerning special orders and liquid coatings such as paints.

These teachings will be the basis for the rejections that follow.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3625

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-34 are rejected under 35 U.S.C. 103(a).

Claims 1-4, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over a publication entitled *Web Ordering May Alter Role of Distributors*, published by National Home Center News, v. 24, n. 10, p. 23-25, on June 22, 1998, by Carol Tice (*Distributor Roles*), in view of an article entitled *Lowe's Launches New Superstore in N.E. Dallas, TX* (hereinafter *Lowe's Superstore*), published on 10 February 1998 on PR Newswire.

As per claim 1, *Distributor Roles* discloses electronic business methods where customers may order customized products from a supplier who may ship the products directly to customers. The steps disclosed include:

- (a) placing by at least one consumer of a customer order directly with a remote supplier specifying customer order information;
- (b) entering customer order information into a customer order subsystem comprised of software maintained on a computer;
- (c) compiling customer order information with a computer and processing the results of this compilation with a production subsystem to yield production parameters;
- (d) operating a production line, in observance of production parameters yielded by the production subsystem;



- (e) assembling containerized product resulting from the production line fulfilling at least one individual customer order and packaging the resulting assemblage as required for shipment;
- (f) transporting each assemblage of product fulfilling each customer order to the delivery address specified by the consumer in placing the customer order;
- (g) whereby each said consumer obtains delivery of product directly to a specified address.

In *Distributor Roles*, See at least page 3, *The future that's already here*, describing placing orders for home improvement products, including customized products, entering customer order information into a customer order subsystem comprised of software maintained on a computer. See also at least references to special order, page 2, paragraph 8. For operating a production line, see at least page 3, line 2, which describes product assembly. See also at least page 3, paragraph 4, describing drop-shipments. See also at least page 4, *Delivering the Goods*. See rejection of claims 21, 22, 26-28, below, for discussion of integration of customer order, production and other sub-systems in client/server environments. See also applicant's prior art disclosures concerning production lines, at least on pages 4-6 and 7-8 of application.

Customers may order home improvement products on the Internet, by entering data and product details (page 3, paragraph 12). See at least page 3, paragraph 5, which describes that even the bulkiest home improvement products may be ordered and ultimately delivered. See also at least page 3, paragraph 1, which describes that

orders may be taken electronically and products are shipped directly from manufacturers to consumers. *Distributor Roles* also describes that orders may be processed for many product lines (page 2, paragraph 10) of many manufacturers.

Like all liquids, liquid coating products such as paint require containerization. Liquid products may include adhesives, cleaning fluids, colorants, disinfectants, epoxy resins, lubricating oils, paints, pesticides, plumbing supplies, sealants, shellacs, soaps, stains, varnishes, etc. Containers may be produced from various materials, including glass (e.g. for hydrochloric acid and other corrosive fluids), metals (e.g., canned pineapple juice, paint, beans), rubberized fabric (as in camping canteens), molded plastic (e.g., as in orange juice containers, detergents, paint, bottled water), hybrid containers (e.g., plastic-covered metals for soft drinks, plastic-coated cartons such as used for milk, orange juice, etc.) as well as expansible molded plastic containers such as for carrying water on a camping trip. The various types of containers have different levels of expansibility: from the molded materials themselves, or built-in, such as with a bellows-type arrangement, or such as one finds in a hot-water bottle, or even such as one finds in a zip-lock bag common in supermarkets. Containers can be expansible by the nature of the material used, whether they are made of metal, molded plastic or some other material.

Plastic may be preferred over rigid metal containers because plastic containers often weigh less than their metal counterparts. Lower weight of a container translates into reduced shipment and delivery costs. In addition, a container that is partially filled weighs less than if it were fully filled with a liquid coating. This reduction in weight also

results in lowered shipping and delivery charges. For example, a 10-thousand gallon container of liquid coating product would normally require thicker walls than the walls of a container designed to transport a 1-ounce, 1-gallon or 55-gallon volume of the same liquid coating product. While bulk-shipments may reduce shipping costs, shipping is often based on weight, including the weight of individual metal, glass or plastic containers. Thus, thick, rigid metal containers may weigh more and cost more to ship than their plastic equivalents. Similarly, thicker plastic containers may weigh more and cost more to ship than thinner plastic containers. Collapsible plastic containers would most likely weigh less than rigid walled plastic containers, and cost less to deliver.

*Distributor Roles* does not specifically disclose ordering, production, packaging and delivery of liquid coating products. *Lowe's Superstore* discloses that home improvement retailers (e.g., HOME DEPOT, LOWE's) sell over 40,000 related home improvement products, including special order, custom products such as custom paints.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to disclose ordering, production, packaging and delivery of liquid coatings. One of ordinary skill in the art in the art of electronic commerce at the time the invention was made would have been motivated to include ordering, production, packaging and delivery of liquid coatings for the obvious reason that liquid coatings are another type of product that is in great demand by customers for home improvements and for home building. Liquid coatings are often delivered to construction sites and customer addresses (drop-shipments). Very large orders may be shipped to other manufacturers (for example General Motors may order several rail cars

Art Unit: 3625

of customized liquid coating product for a run of several thousand cars). Builders of apartment buildings may also request large orders deliverable via railroad, trucks, and other shipment methods.

Distributors may benefit from becoming electronic clearinghouses, as taught by *Distributor Roles*. Distributors would cut their operational costs since they would not have to receive, store and ship product orders. Distributors would not have to maintain an inventory of containerized, fixed colors. Distributors can provide their customers with economic benefits associated with of just-in-time inventory, which reduces inventory costs to customers.

*Distributor Roles* and *Lowe's Superstore* do not specifically disclose that liquid coating products may be containerized in rigid metal paint cans (as in claim 2), or that rigid metal paint cans may be partially filled (as in claim 3), or that liquid coating products may be containerized in molded plastic expansible containers (claim 4) or that molded plastic expansible containers may possess a collar about an aperture which collar is gripped during operation of said production line (claim 6). Prior art disclosed by applicant shows that liquid coating products, such as paint, may be containerized in rigid metal paint cans (see page 2 of application, General Background). Partial filling of a container produces savings in several areas, such as (a) manufacturing and (b) delivery.

In manufacturing, manufacturers and distributors can save money when they acquiring materials such as plastic and metal for their containerization and production lines. When production costs are lowered, manufacturers and distributors can charge

less for their products and pass part of the savings to their customers, and still increase their profits. Lower production costs allows better use and allocation of scale production and allow for better utilization of natural resources. Better natural resource use and allocation also permits less contamination and provides everyone on the planet with a healthier environment.

In delivery, manufacturers and distributors can also save money in shipping and delivery. Identical volumes of a liquid would weigh less when they are placed in plastic rather than in metal containers. Liquid coatings in plastic containers cost less to deliver to a customer site than in metal containers. One would want to partially fill a plastic or metal container because doing so cuts down the cost of shipping and delivery, thereby reducing the overall price to a consumer. Where liquid coating is in an expandible container, the container will take up less storage space. This translates into reduced storage costs for the party placing the order.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to disclose that liquid coating products may be held in rigid metal paint cans which may be partially filled and in molded plastic expandible containers which possess a collar about an aperture whose collar is gripped during operation of the production line.

One of ordinary skill in the art at the time the invention was made would have been motivated to disclose that liquid product may be containerized in rigid metal paint cans, and in molded plastic expandible containers, that the rigid metal paint cans may be partially filled and that the expandible containers possess a collar about an aperture

Art Unit: 3625

whose collar is gripped during operation of the production line for the obvious reason manufacturers and customers want to reduce the costs incurred to engage in business. Cost savings translates into greater profit for manufacturers; costs savings also reduces prices that customers pay. The savings can occur in several places, including (a) manufacturing and (b) delivery, as shown above.

One of ordinary skill in the art would know that placing a liquid into a molded plastic container might be done by filling the container through an aperture that is simultaneously held by a gripping mechanism. Doing so assures that the bulk of the liquid is properly transferred into a container, thereby eliminating waste of the liquid and preventing the liquid from spilling and interfering with the operation of production machinery. Additionally, gripping a container by a collar facilitates placement of a sealing top on the container.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Distributor Roles* in view of *Lowe's Superstore*.

As per claims 7-10, *Distributor Roles* and *Lowe's Superstore* disclose identifying products for assembly and delivery (page 3, paragraph 1, describing that orders may be taken electronically and shipped directly from manufacturers to consumers; page 3, paragraph 4, describing drop-shipment; page 4, Delivering the Goods). Shipment and delivery often require information of where to deliver a package (or a container, for liquid home improvement products). *Distributor Roles* and *Lowe's Superstore* do not provide details concerning how packages and shipments are specifically labeled.

*Distributor Roles* and *Lowe's Superstore* disclose customer ordering, shipping and delivery of home improvement products, including liquids such as paints. Shipping and delivery requires identifying packages with customer order information such as at least customer name, street address, city, zip code. Packages often have product information such as at least supplier inventory code(s) to identify the product, type of product and other attributes of a product. Other data may include delivery date, quantity of a product, number of packages in a shipment. The information is often printed on adhesive labels that are attached on packages. The label may contain information in human-readable print format. The label may also contain information printed as bar code, for scanning.

Shipping and delivery requires the identification of *to* and *from* information on a package. Where many shipments take place, it is most cost effective to use labels and attach them to a package. Labels often contain customer order information such as the contents of a package, the delivery destination and name of recipient. Labels often include bar codes that can be scanned. Suppliers place various types of information on labels to track inventory and to provide information to delivery services to get a product to its destination. (See also rejection of claims 7-10 in First Office Action). A package may be impossible to deliver without proper identification on the package.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply product identification features to shipments of liquid coating home improvement products. One of ordinary skill in the art at the time the invention was made would have been motivated to apply product identification features

to shipments of liquid coating home improvement products for the obvious reason that doing so allows containers of liquid coating home improvement products to become part of the normal stream of commerce. While detailed information varies according to product, in the case of liquid coating products, the label may include the name of the color in the containers. It is well known that containers of liquid coatings have their contents printed on labels. For liquids coatings such as stains or polyurethanes, the contents might be described as glossy or semi-gloss cherry color. For paints, another type of liquid coating, their containers might have printed labels with name of a color, as well as other features (e.g., flat, glossy, latex, water-based, etc.). In addition, it is common to see an actual color displayed on a container, to further avoid confusion. The printed label enables human identification of contents of a container. Proper identification of a package and its contents is critical for reducing errors, cutting costs and increasing customer satisfaction. Increased customer satisfaction often results in increased purchases and increased profits for entities in a supply chain such as above.

Claims 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Distributor Roles* in view of *Lowe's Superstore* and disclosed prior art.

As per Claims 11-16 *Distributor Roles* and *Lowe's Superstore* disclose that home improvement products, including paints, may be sold from a manufacturer to distributor(s) as well as to customer(s). Delivery can be to a contractor at a job site of to customers (*Distributor Roles* page 3, paragraph 1, describing that orders may be taken electronically and shipped directly from manufacturers to consumers; page 3, paragraph 4, describing drop-shipments; page 4, Delivering the Goods). *Distributor Roles* and



*Lowe's Superstore do not* provide details of operating a production site that fills rigid metal paint cans or expansible containers made out of molded plastic.

*Distributor Roles and Lowe's Superstore do not* state that operating a production line may include addition of blended liquid coating base to an empty container (claim 11), or that blended liquid coating base may be obtained from a manufacturer in large containers ranging in volume from fifty-five gallon barrels through railroad tank cars inclusive of 1,000 liter totes (claim 12), or that one may use a pipeline to transfer liquid coating base from large containers to a tank from which the liquid coating base is dispensed (claim 13) or the method would include a step to identify the type of liquid coating base added upon the container (claim 14), or that that operation of a liquid coating production line includes the addition of colorant to a blended liquid coating-base (claim 15), or that the method would include a step of identifying the name of the color resulting from the colorant added upon the container (claim 16). Applicant discloses prior art for production lines for liquid coating products (see at least application, page 4, through page 6, and pages 7-8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to disclose that manufacturers may ship liquid home improvement products directly to distributors and customers in 55-gallon barrels or railroad tank cars (as in claim 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to describe that the liquid product is transferred from a manufacturer's container to a tank for dispensing said liquid (as in claim 13). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to include steps for identifying the type of liquid coating base added upon the container (claim 14), adding colorant to the blended liquid coating base (claim 15) and identifying the resulting color (claim 16).

One of ordinary skill in the art at the time the invention was made would have been motivated to disclose that manufacturers may ship liquid home improvement products directly to distributors and customers in 55-gallon barrels or railroad tank cars (as in claim 12) for the obvious reason that bulk purchases from a manufacturer is known to lower the overall costs of producing goods. By achieving economies of scale, manufacturers and distributors save money. Savings may be passed in a distribution chain, benefiting all parties and creating jobs and financial opportunities.

One of ordinary skill in the art at the time the invention was made would have been motivated to disclose that liquid products may be transferred from a manufacturer's container to a tank for dispensing said liquid (as in claim 13) for the obvious reason that raw materials must be integrated into a manufacturing process and a first step of doing so includes identifying and using the materials received from a manufacturer. While one can always integrate outside containers into a manufacturing process, it may be necessary to first transfer the product into the specific product line. While terms of product delivery will vary by industry, offloading a railroad tank, for example, could mean that a railroad tank may be leased only for a short length of time, cutting down overall production costs to everyone involved. This savings can be used to improve marketing, or may be passed directly to customers, or may be kept as profit by entities along a supply chain.

Claims 17-20 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Distributor Roles* in view of *Lowe's Superstore*.

As per claims 17-20, and 23-25, *Distributor Roles* discloses various ways for customers to connect to remote suppliers and place product orders into customer order subsystems; *Lowe's Superstore* discloses liquid coatings such as paint. In *Distributor Roles*, see at least Connectivity to the Internet, pages 5-6, via hand-held portables such as cell-phones (as in claim 17), PDA's and other types of Internet devices (as in claims 23, 24). See also at least page 2, paragraphs 8, 9 describing that customers may use an Internet-wired kiosk (i.e., an example of a dedicated terminal with Internet access only to a web site maintained by the remote supplier, as in claim 25), universal datatone for telephone, fax (as in claim 20, see at least page 1, paragraph 3, and page 3, paragraph 11), data, smart phones, Web-TV. *Distributor Roles* discloses ordering via telecommunications (as in claim 17), via telephones connected to a public telephone exchange (as in claim 18) in disclosing the use of the public telephone system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Distributor Roles* and *Lowe's Superstore* and disclose electronic ordering for liquid coatings. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of *Distributor Roles* and *Lowe's Superstore* and disclose electronic ordering for liquid coatings for the obvious reason that liquid coatings are an integral part of home improvement products. Using existing order systems for another type of home improvement product builds on already proven systems and technologies. Suppliers

can continue to use reliable human-computer interfaces; customers in turn can benefit since they do not have to connect to different systems for different home improvement products. This provides economic benefit to distributors and consumers alike.

Claims 21, 22, 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Distributor Roles* in view of *Lowe's Superstore*.

As per claims 21, 22, 26-28, *Distributor Roles* discloses an interactive network of clients and server machines in the form of customer order subsystems, production subsystems over the Internet. *Distributor Roles* describes client/server network architecture with multiple nodes.<sup>1</sup> Each computer or process on the network is either a client or a server. The word server may refer to a physical machine or the software that performs server tasks. In a network, one may place one or more server systems or subsystems on the same or different physical computer. The configuration takes into consideration different needs of a merchant's system as a whole. On a system with heavy Internet volume, for example, it might make sense to have separate logical or physical machines to handle Internet traffic. One does this to decrease the amount of time users must wait for a merchant's response. Merchants lose sales and money when users are forced to wait. Users tend to avoid sites that make them wait.

A merchant's site might have a node to handle its customer orders. The node might contain one or more logical or physical machines that process customer requests

---

<sup>1</sup> client server architecture is a network architecture in which each computer or process on the network is either a client or a server. Servers are powerful computers or processed dedicated to managing disk drives, printers or network traffic. Clients are PCs or workstations on which users run applications. Clients rely on servers for resources, such as files, devices and even processing power. (Definition of Client/Server Architecture, Computer and Internet Dictionary, Random House/Websters, third edition).

via application programs. The same merchant might have a separate node to handle database activity, since I/O operations are relatively slow. A merchant may use names that relate to a server's function. For example, a subsystem that handles user requests might be called a front-end system, a customer node, a merchant node, a customer application system, or a merchant node. Similarly, a merchant might use the term customer database system to refer to the node that access information from a customer database and prepare it for a production subsystem. The names applied to systems and sub-systems tend to be descriptive, easily recognizable to humans. The names do not affect what the machines do.

*Distributor Roles* and *Lowe's Superstore* do not specifically disclose configurations for distributing a production and a customer order subsystems are distributed across the various networks that make up the Internet. *Distributor Roles* and *Lowe's Superstore* disclose the claimed configurations of this application except for explicit disclosure as to physical and logical location of each node on a network. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to place a node in any configuration on a network since it has been held that rearranging parts on an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Claims 29-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Distributor Roles* in view of *Lowe's Superstore* and further in view of an article entitled "Welcome Homes on the Virginia Beach Tour – Visit a premier colonial revival-style home, painstakingly built and restored", (*Colonial Restoration*) by Ann Wright, published

on 19 April 1998, Virginian – Pilot, Norfolk VA, downloaded from the Internet on 16 October 2002.

*Distributor Roles* and *Lowe's Superstore* disclose web sites that provide product information to assist customers in selecting home improvement products, including liquid coating products (claim 29). On a web site, customers input information that defines the product sought (as in claim 31). As is well known to one of ordinary skill in the art at the time the invention was made, the type of digital data exchanged on the Internet may include text, images, sound, video, photograph and modeling data (as in claim 34). *Lowe's Superstore* discloses that customers may place special orders and may carry out computerized color matching.

*Distributor Roles* and *Lowe's Superstore* do not specifically describe details such as identification of a plurality of particular, custom colors nor where assisting in the selection of a liquid coating product includes liquid based characteristics nor selection of liquid coating product appropriate to a given job as defined by information input by the customer, nor recommending a liquid coating base nor calculating volume for a given application as defined by customer input, nor that assistance in the selection of liquid coating product includes the suggestion of at least one particular, custom color based upon digital input by said customer, said digital input including but not limited to digital video input, digital photograph and digital solid modeling input.

Liquid coatings come in different colors. Customers' color tastes vary. Liquid coatings also have properties that allow them to perform better indoors or outdoors. Larger rooms and physical areas often require more paint than smaller spaces. The

Art Unit: 3625

amount of water-based paint required for a child's bedroom, for example, is much less than the volume of a latex-based paint that one would need to paint the outside of a single-family home.

On page 4, Applicant discloses that

The prior art considered most pertinent to the instant invention is comprised of the web sites or home pages currently accessible on the Internet advertising paint product made by different manufacturers including PPG, Sherwin-Williams, and Kelly-Moore. All three sites offer *digital assistance in product selection, color selection, calculation of volume required as determined by the size of the surface to be covered, and store selection*. The customer can review information regarding the *paint base, review color swatches, input dimensions defining the area to be covered*, and input an address which will yield the closest retailer to the address inputted. While a comparatively larger number of other types of 'e-commerce' *are known*, none specifically address liquid coatings such as paint except for the web sites representing paint manufacturers (emphasis added).

*Colonial Restoration* discloses paint customization and matching for historical restorations. *Colonial Restoration* describes the use of custom colors for formulas that are no longer in production (see at least page 2, last two paragraphs).

Therefore, it would have been obvious to one of ordinary skill in the art to include plurality of custom colors, specific characteristics of liquid coating products according to job specifications, recommendation of liquid coating base, volume calculation per user input, or that customer input may include digital video, photos or digital solid modeling.

One of ordinary skill in the art would have been motivated to include plurality of custom colors (claim 29), specific characteristics (claim 30) of liquid coating products according to job specifications (claim 31), recommendation of liquid coating base (claim 32), volume calculation per user input (claim 33), or that customer input may include digital video, photograph or digital solid modeling (claim 34).for the obvious reason that these are normal considerations when selecting liquid coating product bases and colors.

Art Unit: 3625

Customers often have different requirements. For example, a mother who wishes to paint her child's room would have different needs from an industrial customer who wishes to paint many apartments in a condominium complex. Similarly, architects and interior designers have different needs from customers who order liquid coating products to coat the bottom of a yacht, or to coat the outside of a train or the outside of a truck or bus. One of ordinary skill in the art would have known to include steps to facilitate customer selections and include requirement characteristics that would facilitate selection of custom colors, base, volume, among others. One of ordinary skill in the art also would have known that since customers have specific needs, a web site might also include means for a customer to input digital video, digital photograph as well as digital solid modeling. One of ordinary skill in the art would know that Computer Aided Design and Computer Aided Manufacturing (CAD/CAM) systems have been widely used in industry for several decades. Thus, it would have obvious to include similar technology in the design of web sites for selection of custom liquid coating products for home improvement and for other uses. By doing so, a manufacturer will increase customer satisfaction, resulting in additional sales and increased profits.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Zurita whose telephone number is 703-605-4966. The examiner can normally be reached on 8:30 am to 5:00 pm, M-F.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins can be reached on 703-308-1344. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

JZ  
**James Zurita**  
**Patent Examiner**  
**Art Unit 3625**  
October 19, 2002

  
JEFFREY A. SMITH  
PRIMARY EXAMINER